

GEODESIC INFINITESIMAL DEFORMATIONS OF GENERALIZED RIEMANNIAN SPACES

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ABSTRACT. Infinitesimal deformations of subspaces of a generalized Riemannian space are studied in this paper. Variations of some geometric objects are found. Necessary and sufficient conditions which provide the existence of a geodesic infinitesimal deformation of a generalized Riemannian space are obtained. Basic equations of a geodesic infinitesimal deformation such as a system of differential equations which determined an infinitesimal deformation field are given.

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